WHAT IS CLAIMED IS:

1. A data storage device, comprising:

a write head for writing data onto a magnetic disk;

a write circuit for generating the write current to be supplied to said write head by using a supplied positive voltage and a supplied negative voltage;

a converter for generating said negative voltage to be supplied to said write circuit from said positive voltage; and

a controller for variably setting the magnitude of said negative voltage.

2. The data storage device according to claim 1, wherein said controller sets the magnitude of said negative voltage in accordance with an ambient temperature for said magnetic disk.

3. The data storage device according to claim 2, wherein said controller sets a large absolute value for said negative voltage if said ambient temperature is low, and sets a small absolute value for said negative voltage if said ambient temperature is high.

4. The data storage device according to claim 1, wherein said controller sets the magnitude of said negative voltage in accordance with the magnitude of said positive voltage.

5. The data storage device according to claim 4, wherein said controller sets a large absolute value for said negative voltage if said positive voltage is low, and sets a small absolute value for said negative voltage if said positive voltage is high.

6. The data storage device according to claim 1, wherein said controller changes the magnitude of said negative voltage when said write head is not performing a write operation.

7. The data storage device according to claim 1, wherein said write circuit ensures that the write current value used for a specified period after the start of a write is greater than the write current value used after the elapse of the specified period.

8. The data storage device according to claim 1, wherein said write circuit is of a voltage-driven type that directly provides voltage drive for said write head.

9. The data storage device according to claim 1, wherein said converter comprises a register for storing a voltage command from said controller and a voltage converter for converting the voltage in accordance with the value stored in said register.

10. A data write method, comprising:

a first step of receiving a seek command or a write command for a read/write head over a magnetic disk;

a second step of setting the magnitude of the negative voltage to be supplied to a drive circuit for said read/write head in accordance with a specified condition; and

a third step of causing said read/write head over said magnetic disk to perform a seek operation or a write operation.

11. The data write method according to claim 10, wherein said specified condition is the ambient temperature for said magnetic disk.

12. The data write method according to claim 11, wherein said second step sets a large absolute value for said negative voltage if said ambient temperature is low and sets a small absolute value for said negative voltage if said ambient temperature is high.

13. The data write method according to claim 10, wherein said specified condition is the magnitude of supplied said positive voltage.

14. The data write method according to claim 13, wherein said second step sets a large absolute value for said negative voltage if said positive voltage is low and sets a small absolute value for said negative voltage if said positive voltage is high.

15. A program enabling a computer to exercise a first function for receiving a seek command or a write command for a read/write head over a magnetic disk; a second function for setting, in accordance with a specified condition, the magnitude of the negative voltage to be supplied to a write circuit which drives said read/write head; and a third function for causing said read/write head over said magnetic disk to perform a seek operation or a write operation.